General Purpose State Machine

ABSTRACT OF THE DISCLOSURE

A general purpose state machine employs generic components such as flags, counters, and programmable logic, enabling it to be easily reused, even if maintained in hard form. Preferably, the state machine is connected to receive information from an external circuit, typically a system to be controlled by the state machine. The state machine includes a programmable memory in which each row stores a word representing output information as a sequence of bits. The state machine includes a first multiplexer which has some of its input terminals coupled to receive the information from the external circuit, and some input terminals connected to receive information from the programmable memory. In response to these signals the first multiplexer provides an output signal. A control circuit is connected to receive the output signals from the first multiplexer. The control circuit provides a signal which selects a word in the programmable memory. The addressed word then causes the state machine to change to the next state, thereby controlling the external circuit.